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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/508,975	09/24/2004	Renee-van Schijndel	118989-04325620	1110
43569	7590	12/08/2005		
MAYER, BROWN, ROWE & MAW LLP 1909 K STREET, N.W. WASHINGTON, DC 20006			EXAMINER SERGENT, RABON A	
			ART UNIT	PAPER NUMBER
			1711	
DATE MAILED: 12/08/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/508,975	Applicant(s) SCHIJNDEL ET AL.	
	Examiner Rabon Sergeant	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. Claims 12-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claim 11 is drawn to a hotmelt adhesive; however, dependent claims 12-20 are drawn to a polyurethane of claim 11; therefore, it is unclear if these dependent claims are drawn to the adhesive or only the polyurethane component. The examiner has taken the position that the dependent claims are drawn only to the polyurethane and are not particularly limited by the "adhesive" language of claim 11.

Within line 3 of claim 13, it is unclear how the percent sign is to be interpreted, in view of the claimed ratio language. Applicants' response has not clarified the issue. A ratio sets forth a relationship between the recited components of the ratio, while a percentage is based upon a base value. Therefore, it is unclear how to interpret the percent signs in view of the ratio relationship. Furthermore, given the language set forth for the ratio, it is questioned if the claim requires the selection of the dimer fatty acid of claim 1; if not, then clarification is required. Applicants have not addressed this issue.

With respect to claim 15, it is unclear if the claim language is to allow for the polyester to be additionally derived from the dianhydrohexitol. It is not seen that applicants' response has clearly addressed the issue raised by the examiner.

Within claims 16 and 17, bases have not been clearly set forth for the claimed weight percents. Applicants' response has not clarified or adequately addressed the issue. Percent values must have a clear basis in order to be meaningful. In the instant case, it is unclear if the

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recited percent values are based on the weight of the polyurethane, the adhesive, or a component of the composition (i.e.; the polyester).

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 11-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krebs ('493) in view of Meyborg et al. ('051) and Dirlikov et al. ('563).

Krebs et al. disclose hotmelt polyurethane adhesives produced from the reaction of polyisocyanate, polyester polyols, and chain extender, wherein suitable reactants for the polyester polyol are disclosed as being dimer fatty acids and dimer fatty alcohols. See abstract; column 4, lines 23-52; and column 5, lines 41-47.

4. Though Krebs et al. fail to disclose the use of 1,4:3,6 dianhydrohexitol in the production of the polyurethanes, the position is taken that the use of these compounds as extenders within polyurethane compositions was known at the time of invention. This position is supported by the

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teachings of Meyborg et al. and Dirlikov et al. Meyborg et al. disclose at column 1, lines 40+ that the use of 1,4:3,6 dianhydrohexitol as a chain extender within polyurethanes permits the production of high quality polymers from compositions having adjustable potlife. Dirlikov et al. disclose at column 5, lines 53+ that the use of dianhydrohexitol within polyurethanes is believed to improve hydrolytic stability and thermostability. Therefore, in view of the expectation that improved properties would result, one of ordinary skill in the art would have been motivated to incorporate 1,4:3,6 dianhydrohexitol as a reactant within the adhesive compositions of the primary reference.

5. The examiner has considered applicants' response; however, the response is insufficient to overcome the prior art rejection. Firstly, it is noted that arguments based on the properties of the adhesive are not commensurate in scope with claims 12-21 (these claims are simply drawn to polyurethanes). Secondly, despite applicants' arguments, the examiner has provided rationale for using the dianhydrohexitols of the secondary references within the polyurethane adhesives of the primary reference. The recited motivation positions are relevant for virtually any polyurethane composition, including adhesives, since the chemistries of the various polyurethanes are largely based on the same reactions (i.e.; the reaction of isocyanates with active hydrogen compounds).

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

R. Sergent
December 1, 2005


RABON SERGENT
PRIMARY EXAMINER